

METHOD TO IMPROVE PROFILE CONTROL AND N/P LOADING IN DUAL DOPED GATE APPLICATIONS

ABSTRACT OF THE DISCLOSURE

A method for etching a polysilicon gate structure in a plasma etch chamber is provided. The method initiates with defining a pattern protecting a polysilicon film to be etched. Then, a plasma is generated. Next, substantially all of the polysilicon film that is unprotected is etched. Then, a silicon containing gas is introduced and a remainder of the polysilicon film is etched while introducing a silicon containing gas. An etch chamber configured to introduce a silicon containing gas during an etch process is also provided.